

AMENDMENT TO THE CLAIMS

The present listing of claims will replace all prior versions and listing of the claims in the application.

Listing of Claims

1-55 (Canceled)

56. (Previously presented) A toroidal plasma chamber for use with a reactive gas source comprising:

an inlet for receiving a gas;

at least one plasma chamber wall for containing the gas, the plasma chamber wall comprising at least one of a metallic material or coated metallic material;

at least one dielectric spacer that electrically isolates the plasma chamber into a plurality of portions to prevent induced current flow from forming in the plasma chamber itself, the dielectric spacer being protected from a plasma formed in the plasma chamber by at least one plasma chamber wall; and

an outlet for outputting a reactive gas generated by the interaction of the plasma and the gas.

57. (Previously presented) A toroidal plasma chamber for use with a reactive gas source comprising:

an inlet for receiving a gas;

one or more chamber walls for containing the gas, the chamber walls comprising at least one of a metallic material, coated metallic material or dielectric material and capable of receiving at least one dielectric spacer that electrically isolates a region of the plasma chamber to prevent induced current flow from forming in the plasma chamber itself, one or more of said plasma

chamber walls capable of protecting the at least one dielectric spacer from a plasma formed in the plasma chamber; and

an outlet for outputting a reactive gas generated by the interaction of the plasma and the gas.

58. (Previously presented) The plasma chamber of claim 57 further comprising the at least one dielectric spacer.
59. (Previously presented) The plasma chamber of claim 57 wherein the dielectric spacer is protected from the plasma by a protrusion in at least one plasma chamber wall.
60. (Previously presented) The plasma chamber of claim 57 wherein the dielectric spacer is protected from the plasma by at least one protruded plasma chamber wall.
61. (Previously presented) The plasma chamber of claim 60 wherein the dielectric spacer is disposed in a recess adjacent the at least one protruded plasma chamber wall.
62. (Previously presented) The plasma chamber of claim 57 further comprising a vacuum seal disposed adjacent the dielectric spacer.
63. (Previously presented) The plasma chamber of claim 58 wherein the dielectric spacer is protected from the plasma by a protrusion in one or more of said plasma chamber walls.
64. (Previously presented) The plasma chamber of claim 58 wherein the dielectric spacer is protected from the plasma by at least one or more protruded plasma chamber walls.
65. (Currently amended) The plasma chamber of claim ~~53~~58 wherein the dielectric spacer is disposed in a recess adjacent the at least one or more protruded plasma chamber walls.

66. (Previously presented) The plasma chamber of claim 58 further comprising a vacuum seal disposed adjacent the dielectric spacer.